In the Abstract:

Please replace the Abstract with the following:

A decision feedback equalizer finite impulse response (DFE FIR) filter for cancelling inter-symbol interference within a signal transmitted through a communication channel. The DFE FIR filter includes a feed-forward equalization path to receive the signal transmitted through the communication channel and generate a first partially equalized signal from the signal based on a plurality of coefficients associated with the feed-forward equalization path; a feedback equalization path to generate a second partially equalized signal that corrects for the inter-symbol interference within the signal based on an output of the DFE FIR filter; a summer to combine the first partially equalized signal with the second partially equalized signal; and a signal amplifier to receive the combined signal from the summer and generate the output of the DFE FIR filter.